
EXPERIENCE

CivicPlus — New Haven, CT (Remote)

Senior Software Engineer II

July 2023 – Present

- **Agentic AI/MCP Architecture:** Architected a Model Context Protocol (MCP) server enabling autonomous chat agents to handle multi-step service requests. Partnered with AI Platforms team to co-develop a “Staff Agent” with tools that parse unstructured reports into geocoded data, organizational schemas, and dynamic form requirements.
- **Semantic Search Infrastructure:** Designed and shipped pgvector-based semantic search to production, replacing Elasticsearch and reducing operational complexity. Integrated OpenAI embeddings with rate limiting and cost controls; built Ollama-based local dev environments cutting API spend during iteration.
- **Data Integrity Initiative:** Drove multi-phase schema enforcement across 50+ database columns, designing rollout strategy to safely add NOT NULL constraints in production. Built validation error tracking system and cleanup tooling that unblocked future schema migrations platform-wide.
- **Platform Modernization:** Selected Ruby 3.3.5/Rails 7.2.2 upgrade path to address CVEs and unblock future platform work; followed with Webpacker→jsbundling-rails migration for Node 18 compliance. Coordinated zero-downtime rollout across SRE, QA, and frontend teams.
- **Platform Risk Reduction:** Reduced technical debt by deprecating legacy Q&A, SAML, and Facebook OAuth systems while architecting identity refactors supporting multi-email user migrations and cross-service federation via RabbitMQ.

Lead Software Engineer

June 2022 – July 2023

- **Technical Leadership:** Set technical direction for 5-engineer team; owned code quality standards and architectural consistency across Rails and Ember. Partnered with Architectural Review Board on platform decisions impacting 800 local governments.
- **Infrastructure & Compliance:** Defined roadmap for Rails 7.0/Ruby 3.0 migrations; implemented NIST-compliant CloudWatch logging for enterprise security requirements.
- **Third-Party Integrations:** Architected data-processing pipelines for CityWorks, Accela, and Microsoft Dynamics integrations; designed ArcGIS feature layer provisioning system.

Senior Software Engineer

April 2020 – June 2022

- **Real-Time Communications Platform:** Built greenfield constituent messaging system with GraphQL API, ActionCable WebSockets, and ActionMailbox email processing. Integrated Twilio/SendGrid for omni-channel communication.
- **Geospatial Engineering:** Developed municipal 311 issue management with Rails and PostGIS; built location-based routing and service area assignment.

Riley & Grey — Brooklyn, NY

Software Engineer / Technical Lead

January 2015 – May 2019

- Led development of website hosting and domain provisioning systems; architected and launched a template-based stationery service featuring a custom in-browser editor and backend printing integration.

Friends & Family Foundry — Brooklyn, NY

Software Engineer / Contract Lead

July 2013 – May 2019

- Architected RESTful Rails APIs and React Native mobile applications for construction management (BuildBook) and high-profile clients including Starbucks and IVY.

TECHNICAL SKILLS

Languages: Ruby, JavaScript, TypeScript, Python

Frameworks: Ruby on Rails, Ember, React, React Native, GraphQL

AI/ML: OpenAI API, Google Vision API, Ollama, MCP; GitHub Copilot, Cursor, Claude Code

Infrastructure: AWS, PostgreSQL/PostGIS, Redis, Sidekiq, CI/CD, NIST Compliance

Certifications: AWS Solutions Architect (Associate), AWS Developer (Associate)

EDUCATION

Georgia Institute of Technology — Atlanta, GA · Master of Science in Computer Science

Syracuse University — Syracuse, NY · Bachelor of Science in Economics